

(3R)tetrahydrofuran-2-yl)-2-(N-1-(4-(4-methoxyphenyl))pyrazol-5-yl)adenosine; N⁶-{3-(3R)tetrahydrofuran-2-yl)-2-(N-1-(4-(4-methylphenyl))pyrazol-5-yl)adenosine; N⁶-{3-(3R)tetrahydrofuran-2-yl)-2-(N-1-(4-methylaminocarbonyl)pyrazol-5-yl)adenosine; and N⁶-{3-(3R)tetrahydrofuran-2-yl)-2-(N-1-(4-carboxy)pyrazol-5-yl)adenosine.

27. (New) The compound of claim 10 wherein R¹ is -CH₂OH;

R² and R⁴ are each hydrogen;

R³ is -CONR⁷R⁸;

R⁷ is methyl; and

R⁸ is hydrogen.

28. (New) A method for treating humans comprising administering a therapeutic amount of the pharmaceutical composition of claim 1 to a human in order to treat a condition selected from the group consisting of providing adjunctive therapy with angioplasty, to induce dilation, to inhibit platelet aggregation, to treat inflammation and to treat no-reflow.

REMARKS

Claims 1-18, 20-24 and 26-28 are pending in this application. Many of the application claims have been amended to clarify the scope of the Applicants' invention in response to the Examiner's § 112 rejection. As will be set forth in more detail below, none of the claim amendments narrows the claims in any manner. Instead, the amendments correct punctuation or use alternative language to recite identical claim elements.

The application Examples have been cancelled and replaced with new Examples which include both the original IUPAC nomenclature for each compound and the corresponding adenosine nomenclature. The Applicants have added the parallel adenosine nomenclature to the Examples instead of to the claims as suggested by the Examiner.

In addition, Examples 5 and 6 have been amended to refer to compound 12 as the starting ingredient for the recited synthesis method.

Further, the formula used to depict compounds of this invention has been amended to refer to R^1 , R^2 , R^3 and R^4 with the numbers 1, 2, 3, and 4 in superscripts instead of subscripts. This amendment has been made to conform the formula with the specification in which the numbers 1, 2, 3, and 4 all are used as superscript in the substituents R^1 , R^2 , R^3 and R^4 .

Claims 19 and 25 have been cancelled from this application without prejudice.

Claim 19 has been cancelled from the application and replaced with new claim 26.

Claims 19 and 26 are identical in all respects in that they claim identical compounds. The only difference is that claim 19 uses IUPAC nomenclature to identify the compounds and claim 26 uses adenosine based nomenclature (the Examiner's preference) to name the compounds. As a result, this amendment does not narrow claim 19 in any manner.

New claim 27 has been added to the application to specifically claim a single compound.

New claim 28 has been added to the application to claim methods for using compounds of this invention. No new matter has been added to the application by way of any of these specification and claim amendments.

By way of review, the Applicants have discovered a new class of 2-adenosine N-Pyrazole compositions that are useful as adenosine receptor agonists and that are particularly useful as A_{2A} receptor agonists.

The Examiner's claim objections are overcome as discussed below.

I. THE SECTION 112, FIRST PARAGRAPH REJECTION

The Examiner rejected claims 1-25 under 35 U.S.C. §112, ¶1 as containing subject matter which is not described in the specification in a way that reasonably conveys to one skilled in the



art that the inventors had possession of the claimed invention. Specifically, the Examiner indicates that claim 1 is directed to a vast array of compounds with multiple substituents and that the Applicants have only prepared and tested the pharmacological activity of a few of the substituents.

The Applicants believe that they have described the synthesis of the claimed compounds in a manner sufficient to enable one of skill in the art to make the compounds that fall within the scope of the presently claimed invention without undue experimentation. The Applicants direct the Examiner's attention to synthesis Scheme 1 at application page 17 which describes the synthesis of the basic compound backbone. The pending claims encompass compounds that include the backbone structure and that further include variations to the substituents at R¹, R², R³ and R⁴. Substituents R¹ and R³ have the widest variety of substituents. Based upon the synthesis methods disclosed in Schemes 2-4 at application pages 24-28, it would be readily apparent to one of skill in the art how to select and synthesize the wide variety of compounds that are encompassed by the claimed invention. It would also be readily apparent to one skilled in the art that the substituents selected for R¹-R⁴ can tolerate the reaction conditions set forth in the synthesis schemes without decomposition, or they can be protected from decomposition during the recited synthesis steps.

II. THE SECTION 112, SECOND PARAGRAPH REJECTION

The Examiner rejected claims 1-25 under 35 U.S.C. §112, ¶2 as being indefinite.

The Applicant's believe that the Examiner's rejection of claims 1-25 is improper as they are based on stylistic issues with the claim language. However, the Applicants have responded to the Examiner's rejection by amending the application claims as follows:

- The term "composition" or "composition of matter" has been replaced where it appears in the claims with the term "compounds". This amendment



amends the claim preamble as required by the Examiner. The term "composition" and "compound" refer to the same chemical structure and substituents. Therefore, this amendment does not narrow the scope of the claims.

- Claim 1, line 3 has been amended as suggested by the Examiner to use the alternative word "or" to refer to the two possible R¹ substituents. This amendment does not narrow the scope of claim 1 in any manner.
- The term "alkyl or aryl or heteroaryl amide" has been replaced, as suggested by the Examiner, with the analogous term "alkylaminocarbonyl, arylaminocarbonyl, heteroarylaminocarbonyl". By way of this amendment, the Applicant's have chosen to use terms of art that are familiar to the Examiner to describe identical substituents. This amendment, therefore, does not narrow the claims in any manner.
- Claim 1, line 38 has been amended as suggested by the Examiner to insert the word "the" in the term "wherein the optional". This amendment corrects an incomplete sentence and does not narrow claim 1 in any manner.
- The application claims have been amended to recite potential multiple substituents using Markush group language. These claim amendments do not narrow the claims in any manner.
- The misspelling of the term "vasodilation" has been corrected in claim 20. This amendment does not narrow the claims in any manner.
- Claims 23-25 have been amended as suggested by the Examiner to recite delete the term "of matter" in the phrase -pharmaceutical composition of matter-. This amendment is made at the Examiner's suggestion to delete the "technically incorrect" language from the claims. These claim amendments do not narrow the claims in any manner.

III. THE SECTION 101 REJECTION OF CLAIM 25

The Examiner rejected claim 25 under 35 U.S.C. § 101 because the claim recitation is a use without setting forth any steps.

The Applicants have overcome the Examiner's rejection by canceling claim 25 from the application.

In view of the amendments and arguments presented above, it is believed that pending claims 1-18 and 20-27 of this application are allowable and that all rejections and objections



should be withdrawn. Favorable reconsideration and allowance of the application claims is, therefore, courteously solicited.

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